

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN THE APPLICATION OF:

E. I. DUPONT DE NEMOURS AND COMPANY  
JAMES K. PRESNAIL ET AL.

CASE NO.: BB1441 US NA

APPLICATION NO.: UNKNOWN

GROUP ART UNIT: UNKNOWN

FILED: CONCURRENTLY HEREWITH

EXAMINER: UNKNOWN

FOR: ARTHROPOD DEFENSINS

Assistant Commissioner for Patents  
Washington, DC 20231

Sir:

**DECLARATION IN ACCORDANCE WITH 37 CFR 1.821**

I hereby state that the content of the paper and computer readable copies of the Sequence Listing, submitted in accordance with 37 CFR 1.821(c) and (e), respectively are the same.

Respectfully submitted,



THOMAS M. RIZZO  
ATTORNEY FOR APPLICANTS  
REGISTRATION NO. 41,272  
TELEPHONE: 302-892-7760  
FACSIMILE: 302-892-1026

Dated: April 10, 2001

## SEQUENCE LISTING

<110> Presnail, James  
Weng, Zude  
Wong, James

<120> Arthropod Defensins

<130> BB1441 US NA

<140>

<141>

<150> 60/197279

<151> 2000-04-14

<160> 11

<170> Microsoft Office 97

<210> 1

<211> 461

<212> DNA

<213> Scolopendra canidens DS

<220>

<221> unsure

<222> (408)

<220>

<221> unsure

<222> (439)

<220>

<221> unsure

<222> (455)

<400> 1

```
gcaatttcaa aatttttttc tcttctttct ttacgcagtg ctcggaaca tgaagactgt 60
gtatgttatc ttcttagttg ctcttcttgt attagcatta gctggaactt acgtggaagc 120
tggttttcggc tgccccgggg accaatatga atgcaataga cattgcaggg gtaatggatt 180
tactgggggt tactgcactg gatttctgaa gttcacgtgt aaatgctaca catgatcaaa 240
atatgatttt ctggcagttc tccaatttca acaaagggtc tacaacagtc tacagtaaaa 300
tagaaaatta cgaaatctac agccttgacac tcacattaat acctttggga tgtcattgaa 360
atttgcattg ttaataataa tacatgtttg gtttttttca gagaatantt tatagaaaca 420
aaatttttaa ataaatggnt ataatttga taaanaaaaa a 461
```

<210> 2

<211> 61

<212> PRT

<213> Scolopendra canidens DS

<400> 2

```
Met Lys Thr Val Tyr Val Ile Phe Leu Val Ala Leu Leu Val Leu Ala
 1           5           10           15
Leu Ala Gly Thr Tyr Val Glu Ala Gly Phe Gly Cys Pro Gly Asp Gln
          20          25          30
Tyr Glu Cys Asn Arg His Cys Arg Gly Asn Gly Phe Thr Gly Gly Tyr
          35          40          45
Cys Thr Gly Phe Leu Lys Phe Thr Cys Lys Cys Tyr Thr
          50          55          60
```

<210> 3  
 <211> 406  
 <212> DNA  
 <213> *Vaejovis carolinianus*

<400> 3  
 ctctactaca atcactaagt tctttctcca ctcagcttca agaatgaaat ccatagctat 60  
 tattttcatc gttcttggtg ctttctgtat tttggaggat gggattgtag aagctgggtt 120  
 tggatgtccc tttaatgcag gaaaatgcc tagacattgc aaaagtattc gtcgtagagg 180  
 aggcttttgc agaggaactt tcaggacaac ctgcgtttgc tataggtgaa aatccgattt 240  
 atttgccata atggagaccc gtttttattg aatatcgtca gtttccaatt aaagtcattt 300  
 cgagccatac tgaataattt tgtaattctaa caacagatgc aatagtttaa ataaacttat 360  
 acttaacttt taaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaa 406

<210> 4  
 <211> 61  
 <212> PRT  
 <213> *Vaejovis carolinianus*

<400> 4  
 Met Lys Ser Ile Ala Ile Ile Phe Ile Val Leu Val Ala Phe Cys Ile  
           1                  5                  10                  15  
 Leu Glu Asp Gly Ile Val Glu Ala Gly Phe Gly Cys Pro Phe Asn Ala  
                   20                  25                  30  
 Gly Lys Cys His Arg His Cys Lys Ser Ile Arg Arg Arg Gly Gly Phe  
                   35                  40                  45  
 Cys Arg Gly Thr Phe Arg Thr Thr Cys Val Cys Tyr Arg  
           50                  55                  60

<210> 5  
 <211> 386  
 <212> DNA  
 <213> *Argiope sp.*

<220>  
 <221> unsure  
 <222> (351)

<220>  
 <221> unsure  
 <222> (364)..(365)

<220>  
 <221> unsure  
 <222> (386)

<400> 5  
 catttccaaa aaaatgaatg cgagagtcct gttgttgatc tgcctagtcg tctgtgcttt 60  
 tgccacagtg gccgtggaag ctggtttcgg ctgccccctc gaccagatgc agtgtcacaa 120  
 tcattgcagg agcatcaaat acaggggagg ataactgcacc aacttattca agcgcacctg 180  
 caagtgttac ggatgatgac cccccctccc tctcagacag gagcccacac ctttcattga 240  
 catccgattc cgattttcca aatgcaaatt gtaacacatg atgaatttga tgcaagtgcc 300  
 ttaaatttaa ataaatttga ttttacattt taaaaaaaaa aaaaaaaaaa naaaaaaaaa 360  
 aaannaaaaa aaaaaaaaaa aaaaan 386

<210> 6  
 <211> 60  
 <212> PRT  
 <213> *Argiope sp.*

<400> 6

Met Asn Ala Arg Val Leu Leu Leu Ile Cys Leu Val Val Cys Ala Phe  
1 5 10 15  
Ala Thr Val Ala Val Glu Ala Gly Phe Gly Cys Pro Phe Asp Gln Met  
20 25 30  
Gln Cys His Asn His Cys Arg Ser Ile Lys Tyr Arg Gly Gly Tyr Cys  
35 40 45  
Thr Asn Leu Phe Lys Arg Thr Cys Lys Cys Tyr Gly  
50 55 60

<210> 7

<211> 351

<212> DNA

<213> Argiope sp.

<400> 7

cttggttctg tcgacatttc caaaaaaatg aatgcgagag ttctgttggt gatctgccta 60  
gtcgtctgtg cttttgccac agtgaccgtg gaagctggtt tcggctgccc cttcgaccag 120  
atgcagtgtc acaatcattg caggagcadc aaatataggg gaggatactg caccaactta 180  
ttcaagcgca cctgcaagtg ttacggatga tgacccccct cccctctcag acaggagccc 240  
tcacctttca ctgacatccg attccgattt tccaaatgca aattgtaaca catgatgaat 300  
ttgattcaag tgcccttaaa tttaaataaa tttgatttta cattttaaaa a 351

<210> 8

<211> 60

<212> PRT

<213> Argiope sp.

<400> 8

Met Asn Ala Arg Val Leu Leu Leu Ile Cys Leu Val Val Cys Ala Phe  
1 5 10 15  
Ala Thr Val Thr Val Glu Ala Gly Phe Gly Cys Pro Phe Asp Gln Met  
20 25 30  
Gln Cys His Asn His Cys Arg Ser Ile Lys Tyr Arg Gly Gly Tyr Cys  
35 40 45  
Thr Asn Leu Phe Lys Arg Thr Cys Lys Cys Tyr Gly  
50 55 60

<210> 9

<211> 537

<212> DNA

<213> Argiope sp.

<220>

<221> unsure

<222> (429)

<220>

<221> unsure

<222> (498)

<220>

<221> unsure

<222> (524)

<400> 9

tttatctatt ttttgatgtg cgtgactttc atcatggctc tttcgtatcc cccacttgtg 60  
gatgcaggat tcgggtgtcc tttctgccaa ggggaatgta accttcaactg caagcacgtg 120  
gtcaaggcaa ggggcggatt ttgcacaggt gctttcaaac aaacctgcaa atgcaaccga 180

tgattacctt tccagacaac atgaaacacg gacgatggtg ctaactttat ccagacatcg 240  
 gatgccggat taatgatatt acactgaaat gttcatttaa tgtataccta ttttaagattt 300  
 aaaggcagtg atgatttaatt ttttaatatta agttgtacaa gtaacattct aagcaaaaata 360  
 aaataagatt tacgtttttt ttttttttaa taaaaataaa tttaatgggc ctttccgtac 420  
 tgaataaana taactaaaag atagaaacaa tccgggttac accgatttga actcaaatca 480  
 tgtaatggtt taaagggncg acaagaccta cttttaaaat tacngatcag taaagtt 537

<210> 10  
 <211> 55  
 <212> PRT  
 <213> Argiope sp.

<400> 10  
 Met Cys Val Thr Phe Ile Met Ala Leu Ser Tyr Pro Pro Leu Val Asp  
 1 5 10 15  
 Ala Gly Phe Gly Cys Pro Phe Cys Gln Gly Glu Cys Asn Leu His Cys  
 20 25 30  
 Lys His Val Val Lys Ala Arg Gly Gly Phe Cys Thr Gly Ala Phe Lys  
 35 40 45  
 Gln Thr Cys Lys Cys Asn Arg  
 50 55

<210> 11  
 <211> 37  
 <212> PRT  
 <213> Androctonus australis hector

<400> 11  
 Gly Phe Gly Cys Pro Phe Asn Gln Gly Ala Cys His Arg His Cys Arg  
 1 5 10 15  
 Ser Ile Arg Arg Arg Gly Gly Tyr Cys Ala Gly Leu Phe Lys Gln Thr  
 20 25 30  
 Cys Thr Cys Tyr Arg  
 35